

BSAMI – an innovation in MET and implementation towards the future

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Abstract The article deals with the description of the Black Sea Association of Maritime Universities (BSAMI) foundation by six Black Sea region maritime universities - Nicola Y. Vaptsarov Naval Academy, Bulgaria, Batumi State Maritime Academy, Georgia, Constanta Maritime University, Romania, Admiral Ushakov Maritime State Academy, Russian Federation, Odessa National Maritime Academy, Ukraine and hosting Maritime Faculty of Istanbul Technical University, Turkey, Tuzla, on April 2, 2010. The article also presents an introductory information dealing with analysis of the Black Sea Region education activities at present, giving possibility to forecast its further development.

The foundation of BSAMI was caused by the result of the analysis of two leading factors of the modern maritime infrastructure: the world globalization processes and lack of the highly qualified maritime human resources. Accordingly, the main purpose of BSAMI is creation of maritime educative Black Sea global center providing the high standards of seafarers education and certification on the basis of STCW, Regulation I/10.

Keyword :

1. Introduction

The world maritime community, taking into consideration the shortage on the one hand and the increasing need in qualified seafarers on the other hand, actively promotes maritime education activities and modern trends.

The BSAMI countries encompass an area of approximately 18.9 million square kilometers with 295 million people.

BSAMI will serve as a forum for cooperation in a wide range of maritime education affairs with the main purpose of a global center creation to assure knowledge, innovation and implementation towards the future in Maritime Education and Training System (MET).

BSAMI potential development will be more effective with regard to the STCW amendments adopted at Diplomatic Conference, 21-25 June 2010 Manila, the Philippines.

The amendments, known as "The Manila amendments to the STCW Convention and Code" enter into force on January 1, 2012 under the tacit acceptance procedure and are aimed at bringing the Convention and Code up to date with developments since they were initially adopted in 1978 and further revised in 1995.

2. A Brief Description of the Black Sea Maritime Educative Space

The main objectives for BSAMI are the following:

- Education issues in maritime field;
- Extension of the collaboration in science & research;
- Common educative projects implementation;
- Development of a comprehensive MET System for following generations;
- Development of standardized Undergraduate Curricula and an International Certification System for Seafarers Competency.

2.1 Constanta Maritime University (CMU)

CMU was established in 1972. CMU has a growing dynamics of development: 1000 students in 1990 – 5800 students in 2010. CMU consists of 2 Faculties:

Navigation & Maritime Transport Faculty;
Electromechanics Faculty.

CMU is accredited at national level for: bachelor, master degree and doctoral studies. The international accreditation includes European and IMO levels.

CMU being a part of international network of different universities has a wide net of partnership with national and international crewing and shipping companies, maritime national authorities and local administrative entities.

Having new laboratories, simulators, buildings and good financial conditions, CMU proposes the following scheme of the projects - research at the national and European levels, development of human resources, international collaboration, and projects for local community (environmental protection, etc).

2.2 Nicola Y. Vaptsarov Naval Academy (NYVNA)

The mission of the NYVNA is to be an educational institution that trains highly qualified leaders and specialists for the needs of the transforming Navy of the Republic of Bulgaria and the global and national maritime industry. Accordingly, the main objectives are the following:

- Higher military and civilian education for officers for the Navy;
- Higher education for maritime personnel at doctor's, master's and bachelor's degree for the merchant marine;
- Postgraduate training for senior maritime personnel;

Other objectives of NYVNA include vocational training and enhancing the qualification of professional sailors.

The main steps of NYVNA include a more than century long history presented by:

1881 - The establishment of the first technical school in Bulgaria;

1917 – The first officer class graduation;

1929 - Beginning of training of officers for the Bulgarian naval and commercial, sea and river fleets, port and naval aviation specialists;

1956 - Acquisition the status of Academy of Higher Engineering Maritime Training;

1960 - International recognition of the Academy's diploma;

1992 - Beginning of postgraduate training for officers;

1998 – The first full program accreditation of core specialties;

2000 - Approval of syllabi under the STCW 78/95 Convention;

2000 – The first ISO 9002.4 certificate of quality;

2000 - Cofounder of the International Association of Maritime Universities (IAMU).

2001 – The first institutional accreditation;

2003 - Acquisition ISO 9001:2000 certificate of quality;

2004 - Audit by the European Maritime Safety Agency.

Navigation Faculty includes the following specialties – navigation, inland waterway navigation, ship radioelectronics, technology and management of maritime transport and ports.

The Engineering Faculty proposes the following list of specialties - ship machinery, ship electrical systems and technology of ship repairing.

2.3 Odessa National Maritime Academy (ONMA)

The ONMA is the leading higher educational center in Ukraine, which trains officers in all maritime specialties for sea-going, river and fishing fleet. The ONMA is well-known for a long time in the world of marine shipping thanks to its 45 000 highly qualified specialists, its graduates. About 13,000 cadets study at ONMA. The Academy was accredited by the State Board of Ukraine with accreditation level IV (the highest). The terms of studies are the following: four years for Bachelor degree and additional one and a half year for Specialist and Master of Science degree. The system of ship's crew training is in compliance with the requirements of the International Convention STCW-78/95 and other international conventions which give graduates the right to

work on all types of vessels of native and foreign companies. The ONMA Quality Management System is certified by Russian Register.

- ONMA comprises of the following faculties and branches:
- Navigation faculty;
- Navigation on Sea and Inner Waterways faculty;
- Marine Engineering faculty;
- Automation faculty;
- Electrical Engineering and Radio Electronics Faculty;
- Maritime Law faculty;
- Foreign Students' faculty;
- The Azov Maritime Institute of ONMA (Mariupol);
- Izmail Faculty (Izmail);
- Seafaring College of Technical Fleet of ONMA;
- Marinesco Seafaring College.

The Academy has signed the agreements on co-operation with the following foreign shipping companies:

- Priamos Maritime S.A. (Greece);
- Anthony Veder Rederijzaken B.V. (the Netherlands);
- B.K.W. Dredging and Contracting Limited (Boskalis) (the Netherlands);
- Wagenborg Crewmanagement B.V. (the Netherlands);
- MOL Ship Management Co., Ltd. (Japan);
- V. Ships Crew Ltd. (Monaco);
- Stolt-Nielsen Transportation Group B.V. (the Netherlands);
- Tsakos Shipping and Trading S.A. (Greece);
- BW Gas ASA (Norway);
- NYK Shipmanagement (Japan);
- Stamco Ship Management Co. Ltd. (Greece);
- MSC Shipmanagement Ltd. (Cyprus);
- A.P. Møller A/S (Maersk) (Denmark);
- Bernhard Schulte Shipmanagement (Cyprus) Limited;
- Crew Management Services S.A. (Vanuatu).

Teachers and scientists of the Academy actively participate in the following IMO meetings:

- Sub-Committee on Standards of Training and Watchkeeping;
- Sub-Committee on Radiocommunications and Search and Rescue;
- Maritime Safety Committee;
- Sub-Committee on Safety of Navigation;
- Legal Committee;
- Council.

2.4 Admiral Ushakov Maritime State Academy (AUSMA)

AUSMA represents 16 Specialties and 145 courses of professional training with an annually growing number of the cadets (5000 in 2010)

There are Navigation Faculty, Ship Engineering Faculty, Faculty of Economics and Management, Faculty of International Maritime Law and Regional Center of Additional Vocational Training (SRCAVT) as a department of AUMSA that is responsible for the special training of ship staff, personnel of port facilities and shipping companies. SRCAVT effects training in accordance with national requirements of Russian Federation and regulations of the International Conventions as STCW 78/95, SOLAS 74, MARPOL 73/78, ISPS Code and others. Certified instructors and tutors have specialized training and as usual a scientific degree as well as seagoing experience onboard merchant ships. Modern simulation equipment of world leading manufacturers, such as Transas Set (Russia), Ship Analytics (the USA), Nor Control (Norway), Kronberg (Norway) is properly engaged in the training process. About 15 thousand students are trained in different specialized courses annually, the total number of these courses in SRCAVT.

There are 3 branches of AUMSA in other cities.

AUSMA is ready for the co-operation with other countries in organization international seminars, conferences on handling dangerous cargoes in ports and at sea.

AUMSA has all facilities for carrying out Search and Rescue Training Courses in the Black Sea Region.

AUMSA Oil Spill Response Training Courses for the Black Sea Region are aimed at the improvement of ecological stability of Azov-Black Sea region. AUMSA has experience in carrying out Port State Control

Training Courses in the Black Sea Region in accordance with Black Sea Memorandum of Understanding. This course can be attended by candidates from various countries.

2.5 Maritime Faculty of Istanbul Technical University (ITUMF)

ITUMF was established in 1773 as a discipline in Naval Architecture and Marine Charts. Now it has 12 Faculties with 5 campuses including Tuzla. Academic Departments include the following: Maritime Transportation and Management Engineering Department, Marine Engineering Department, Maritime Transportation Management Department, Basic Sciences Department.

There also are Master and PhD programmes at ITUMF. ITUMF also delivers the education activities at:

- Maritime Transportation and Management Engineering Department Labs;
- Full-mission Shiphandling Simulator;
- Shiphandling Simulator;
- The VTS Simulator;
- The GMDSS Simulator;
- Maritime Communication Laboratory;
- Full Mission Liquid Cargo Handling Simulator;
- M/V “Akdeniz” Training Ship and Tug “Hopa”;
- Maritime Navigation Laboratory;
- Seamanship Laboratory;
- Computer Based Training Laboratory;
- Lifeboat Training Platform;
- Fire Training Center;
- Indoor Training Pool.

Marine safety training centre offers the following continuing studies for seafarers:

STCW 78 / 95 COURSES;

ITUMF at International/National MET platforms:

Establishment of the IAMU (founding chair);

Respectability at IMO (STW chairman of MET Issues of 162 Administrator parties to IMO between 2000-2002);

Bilateral International Academic Cooperation with Japan, Romania, Egypt, Poland, Korea, Russia, Ukraine, China, the USA, Bulgaria, Georgia;

ITUMF actively promoted BSAMI foundation process and played an important role in its creation.

2.6 Batumi State Maritime Academy (BSMA)

Maritime education has a century history in Georgia. The first maritime courses were founded in Poti in 1901. Maritime Industrial Technical Secondary School was functioning in Batumi since 1929. In 1944 Batumi Maritime Technical Secondary School was reorganized into Batumi Maritime College. Batumi Higher Maritime College was founded 1992. In 2006 Batumi State Maritime Academy received today’s status – Legal Entity of Public Law – Teaching University - Batumi State Maritime Academy (BSMA).

Maritime education in Georgia is regulated by three laws:

Law of Seafarer’s Training and Certification of Georgia (2000);

Law of Higher Education of Georgia (2005);

Law of Vocational Education of Georgia (2007).

The control of IMO requirements realization in the sphere of Maritime Education in Georgia is under the control of the Maritime Transport Department and National Legislative issues are in the competence of Georgian Education and Science Ministry.

Maritime Transport department, together with Georgian Government for 20 years actively cooperates with IMO and other international organizations:

In June 1993 Georgia became the IMO member.

In 1994-1995 Georgia joined 25 international maritime IMO and UN Conventions.

In 1998 The Law of Georgia on Maritime Areas of Georgia was adopted.

In 1999 Vessels Registration Regulations, Maritime Incidents Investigation Regulations, Maritime Mortgage Registration Regulations, Harbour Master Regulations, Pilot Service Regulations were adopted.

In 2000 the following Laws were adopted: On Training and Certification of Seafarers, in accordance with STCW78/95, and On Maritime Search and Rescue Service.

In May, 2004 IMO MSC confirmed the position of Georgia in the IMO STCW "White List".

Higher education upgrade was recognized as the basic condition for success of Lisbon strategy which the European Union began in March, 2000 and which aspiring the modernization of economic and social systems within EU.

In 2003 Georgia began the transformation of higher education system according to the principles of Bologna process which is actively supported by the European Commission.

BSMA is the basic educational establishment of Georgia. Since 2000 the world-recognized International Quality Management System ISO 9001:2000 is incorporated at the Academy according to the requirements of International Convention STCW 78/95. In 2006 BSMA joined the International Association of Maritime Universities (IAMU).

At present two faculties function at BSMA:

Maritime.

Business and Management.

BSMA developed and presented two higher vocational educational programs:

Marine Navigation.

Marine Engineering.

Maritime Faculty has Bachelor programs:

Marine Navigation.

Marine Engineering.

Electrical Engineering.

Since 2006 the new Training and Certification Centre functions at the Academy.

Cadets of academy pass shipboard training by the training-cargo vessel "ACADEMY".

Training and Certification Centre have the following Transas Set simulators:

Integrated navigational simulator – Navi-Trainer Professional 4000, full navigational bridge.

GMDSS simulator TGS 4100.

Engine Room Simulator ERS 4000.

3. Conclusion: The Main Trends of BSAMI Activities

Practical and proactive innovations in the Black Sea Region are the important part of the whole Global Maritime Infrastructure. Taking into consideration the fact that six Black Sea Region countries provide about 20% of total worldwide existing seafaring officers, the flexible teamwork of Black Sea Association of Maritime institutions will become an effective element of the Global Maritime Community. The global market requires the best quality provision in all activities where the human element plays the most important role. The key elements of the highly qualified seafarers training include the development of creativity skills in all educative spheres. There are three main working directions to be organized within BSAMI frames:

- Research;
- STCW/MET and Legal;
- Information and Communication Technologies (ICT)/Networking.

Accordingly the special attention will be paid on the development of:

- High Technologies in Information and Communication;
- Digital Network of Association Members;
- Distance Learning;
- PC-based Assessment System;
- Digital Library and other data sharing systems;
- Digital Education and Training Courses;
- Digital Assessment etc.

Having considered that the globalization of international maritime community will further progress in the 21st century, and technological developments led by ICT in all areas of human activities will integrate into one whole bigger and complicated system, at the same time, knowledge and innovation will be the key elements of such system, the role of academic institutions in such environment significantly increases, the Black Sea Region countries will share their unique experience in maritime education activities.

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Submitted papers will be published through a rapid and concentrated reviewing process by Paper Committee of Local Executive Committee in Korea Maritime University.

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